

WHAT ARE CLAIMED ARE:

1. An optical disc recording apparatus, comprising:  
an optical pickup that irradiates a laser light onto an optical disc;  
a servo device that performs focus servo for maintaining an approximately fixed distance between the optical disc and a lens of the optical pickup and outputs a signal showing whether the focus servo fails or not;  
a position moving device that moves an irradiating position of the optical pickup on the optical disc;  
a laser power controller that controls a laser power of the laser light in accordance with input data to be recorded;  
a detector that detects whether the focus servo fails or not in accordance with the signal output by the servo device;  
an obtaining device that obtains a standard position of the laser light from an irradiating position at the time of the failure of the focus servo when a failure of the focus servo is detected by the detecting device; and  
a controller that controls the laser power controller to pause the control of the laser power in accordance with the data to be recorded and thereafter controls the position moving device and the laser power controller to restart the control of the laser power in accordance with the data to be recorded from the standard position as a restarting position.
2. An optical disc recording apparatus, comprising:  
an optical pickup that irradiates a laser light onto an optical

disc;

a servo device that performs focus servo for maintaining an approximately fixed distance between the optical disc and a lens of the optical pickup and outputs a signal showing whether the focus servo

5 fails or not;

a position moving device that moves an irradiating position of the optical pickup on the optical disc;

a laser power controller that controls a laser power of the laser light in accordance with input data to be recorded;

10 a detector that detects whether the focus servo fails or not in accordance with the signal output by the servo device;

an obtaining device that obtains a standard position of the laser light from an irradiating position at the time of the failure of the focus servo when a failure of the focus servo is detected by the

15 detecting device; and

a controller that controls the laser power controller to pause the control of the laser power in accordance with the data to be recorded and thereafter controls the position moving device and the laser power controller to restart the control of the laser power in accordance with the  
20 data to be recorded from a position shifted by a predetermined moving amount from the standard position as a restarting position.

3. An optical disc recording apparatus, comprising:

an optical pickup that irradiates a laser light onto a label  
25 surface of an optical disc;

a servo device that performs focus servo for maintaining an

approximately fixed distance between the optical disc and the optical pickup and outputs a signal showing whether the focus servo fails or not;

a position moving device that moves an irradiating position of  
5 the optical pickup on the optical disc;

a laser power controller that controls a laser power of the laser light in accordance with input data to be recorded;

a detector that detects whether the focus servo fails or not in accordance with the signal output by the servo device;

10 an obtaining device that obtains a distance and an angle as a benchmark position, the distance being from an optical disc center to an irradiating position of the laser light, and the angle being between a baseline from the optical disc center to an outer periphery and a line from the optical disc center to the irradiating position, when a failure of  
15 the focus servo is detected by the detecting device; and

a controller that controls the laser power controller to pause the control of the laser power in accordance with the data to be recorded and thereafter controls the position moving device and the laser power controller to restart the control of the laser power in accordance with the  
20 data to be recorded from the benchmark position as a restarting position.

4. An optical disc recording apparatus, comprising:

an optical pickup that irradiates a laser light onto a label  
25 surface of an optical disc;

a servo device that performs focus servo for maintaining an

approximately fixed distance between the optical disc and the optical pickup and outputs a signal showing whether the focus servo fails or not;

a position moving device that moves an irradiating position of  
5 the optical pickup on the optical disc;

a laser power controller that controls a laser power of the laser light in accordance with input data to be recorded;

a detector that detects whether the focus servo fails or not in accordance with the signal output by the servo device;

10 an obtaining device that obtains a distance and an angle as a benchmark position, the distance being from an optical disc center to an irradiating position of the laser light, and the angle being between a baseline from the optical disc center to an outer periphery and a line from the optical disc center to the irradiating position, when a failure of  
15 the focus servo is detected by the detecting device; and

a controller that controls the laser power controller to pause the control of the laser power in accordance with the data to be recorded and thereafter controls the position moving device and the laser power controller to restart the control of the laser power in accordance with the  
20 data to be recorded from a position shifted by a predetermined moving amount from the benchmark position as a restarting position.

5. An optical disc recording method, comprising the steps of:

(a) irradiating a laser light onto a label surface of an optical  
25 disc;  
(b) performing focus servo for maintaining an approximately

fixed distance between the optical disc and the optical pickup and outputting a signal showing whether the focus servo fails or not;

(c) moving an irradiating position of the optical pickup on the optical disc;

5 (d) controlling a laser power of the laser light in accordance with input data to be recorded;

(e) detecting whether the focus servo fails or not in accordance with the signal output at the step (b);

(f) obtaining a distance and an angle as a benchmark position,  
10 the distance being from an optical disc center to an irradiating position of the laser light, and the angle being between a baseline from the optical disc center to an outer periphery and a line from the optical disc center to the irradiating position, when a failure of the focus servo is detected at the step (e); and

15 (g) executing the step (d) to pause the control of the laser power in accordance with the data to be recorded and thereafter executing the step (c) and the step (d) to restart the control of the laser power in accordance with the data to be recorded from the benchmark position as a restarting position.

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6. An optical disc recording method, comprising the steps of:

(a) irradiating a laser light onto a label surface of an optical disc;

(b) performing focus servo for maintaining an approximately  
25 fixed distance between the optical disc and the optical pickup and outputting a signal showing whether the focus servo fails or not;

(c) moving an irradiating position of the optical pickup on the optical disc;

(d) controlling a laser power of the laser light in accordance with input data to be recorded;

5 (e) detecting whether the focus servo fails or not in accordance with the signal output at the step (b);

(f) obtaining a distance and an angle as a benchmark position, the distance being from an optical disc center to an irradiating position of the laser light, and the angle being between a baseline from the optical disc center to an outer periphery and a line from the optical disc center to the irradiating position, when a failure of the focus servo is detected at the step (e); and

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(g) executing the step (d) to pause the control of the laser power in accordance with the data to be recorded and thereafter

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executing the step (c) and the step (d) to restart the control of the laser power in accordance with the data to be recorded from a position shifted by a predetermined moving amount from the benchmark position as a restarting position.